

CHIPS REGIMEN



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SPESOLIMAB SIGNIFICANTLY IMPROVED SYMPTOMS OF GENERALIZED PUSTULAR PSORIASIS

Data from the pivotal Phase II Effisayil™ 1 trial, showed significantly improved signs and symptoms of generalized pustular psoriasis (GPP) in patients experiencing a flare with spesolimab. GPP is a rare, life-threatening neutrophilic skin disease, which is distinct from plaque psoriasis. It is characterized by episodes of widespread eruptions of painful, sterile pustules.

In the 12-week trial, 53 patients experiencing a GPP flare were treated with a single intravenous dose of spesolimab or placebo. Most patients at the outset of the trial had a high or very high density of pustules and impaired quality of life. Results after one week demonstrated that: 54% of patients treated with spesolimab showed no visible pustules, compared to 6% of those treated with placebo. 43% of patients treated with spesolimab showed clear/almost clear skin, compared to 11% of those in the placebo group. After one week of treatment, spesolimab was associated with a higher number of infections and systemic drug reactions compared to placebo.



For some patients, pustular and skin clearance was maintained for the duration of the study. This clearance was accompanied by clinically significant improvements in quality of life and symptoms such as pain and fatigue. These clinical trial results show that spesolimab has the potential to clear the skin of the signs and symptoms of a GPP flare after only one week, with effects observed through the end of the study. The Effisayil™ 2 study will assess the safety and efficacy of spesolimab for the treatment of GPP, including flare prevention and symptom control over 48 weeks. Effisayil™ ON is a five-year, open-label extension study that will provide additional long-term efficacy and safety data for spesolimab in the treatment of GPP.

Reference: Hervé Bachelez, Siew-Eng Choon, Slaheddine Marrakchi, A David Burden, Tsen-Fang Tsai, Akimichi Morita, Alexander A Navarini, Min Zheng, Jinhua Xu, Hamida Turki, Milan J Anadkat, Sushmita Rajeswari, Hairui Hua, Sebastian D Vulcu, David Hall, Kay Tetzlaff, Christian Thoma, Mark G Lebwohl, Effisayil. N Engl J Med. 2021 Dec 23;385(26):2431-2440.

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SAFETY DATA REGARDING COVID-19 VACCINES IN MOTHERS AND THEIR NEWBORN BABIES

It has been some time since the vaccines passed the clinical trials and have been administered to the public, yet there are still speculations about their safety for pregnant women and its effect on newborn children. Recently, a study titled “COVID-19 vaccine response in pregnant and lactating women: a cohort study” was published in the American Journal of Obstetrics and Gynecology (AJOG) by researchers from Brigham and Women’s Hospital, Massachusetts General Hospital (MGH), Ragon Institute of MGH, Harvard and MIT was made to analyse the effectiveness of mRNA-based vaccines (Pfizer-BioNTech and Moderna) to produce antibodies against COVID-19 virus in pregnant and



Currently being the largest study of this kind, it was able to quantify, evaluate and compare the vaccine induced antibody titers among its sample population having 131 vaccine recipients (84 pregnant, 31 lactating, and 16 non-pregnant). According to the study, “titers were equivalent in pregnant and lactating compared to non-pregnant women (median [IQR] 5.59 [4.68-5.89] pregnant, 5.74 [5.06- 6.22] lactating, 5.62 [4.77-5.98] nonpregnant, p=0.24).” These antibodies were also present in the umbilical cord blood and breast milk samples which indicate that COVID-19 immunity can be passed on from pregnant women to their newborn children. The study was also able to conclude that vaccine-induced immune response was

significantly greater than the normal body response to natural infection. Having known these study findings, it is strongly advised and recommended to have pregnant women who are more at risk of COVID-19 infection get vaccinated and pass on the immunity to their children. This study also reaches out to researchers to include this group who displayed the willingness to participate in vaccine research trials which eventually will make the common knowledge of COVID-19 vaccines being dangerous to this group, obsolete.

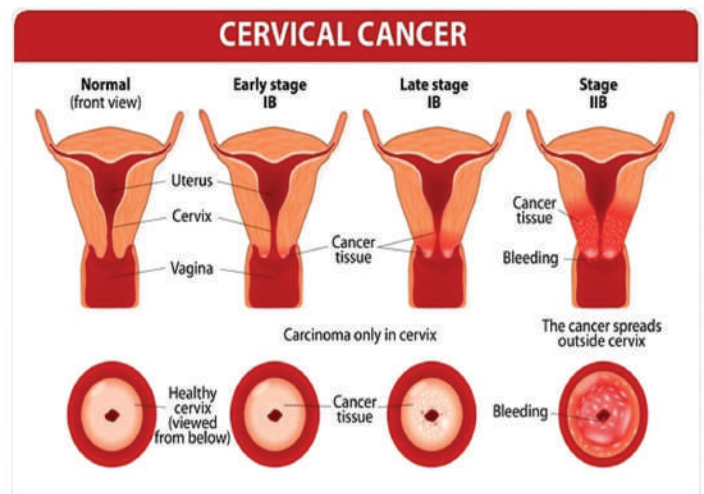
Reference: Emily H. Adhikari, Catherine Y. Spong. COVID-19 Vaccination in Pregnant and Lactating Women. JAMA. 2021; 325(11):1039-1040.

CERVICAL CANCER AND ITS EFFECT ON FERTILITY

According to World Health Organization (WHO), cervical cancer is the fourth most common cancer in women. In the year 2018, around 570 000 women were diagnosed with cervical cancer worldwide and about 311 000 women died from the disease. However, cervical cancer is one of the most successfully treatable forms of cancer if it is diagnosed and managed at early stage. Though, for those patients who were diagnosed in late stage of the cancer can still be treated with proper treatment and palliative care.

What is Cervical Cancer?

Cancer is a type of disease wherein some cells in the body grows in an uncontrollable way and spread to other parts of the body. It happens when there is a mutation in cells that grows out of control forming new abnormal cells. In case of cervical cancer, mutation happened on the woman’s cervix, a part that bridges uterus to the vagina. This cancer can metastasize to other parts of the body such as lungs, bladder, liver, vagina and rectum. This cancer is brought about by the virus called Human Papilloma Virus (HPV). There are different strains of HPV, but only HPV-16 and HPV-18 cause cervical cancer.



Risk Factors:

Any woman can be at risk of having a cervical cancer, especially for those women aging 30 years old and above. But here are some of the factors that can heighten the risk of having cervical cancer.

1. Sexual History: Becoming sexually active at young age (18 years old and below) and having multiple sexual partner can increase risk of having cervical cancer.

2. Smoking: Tobacco smoke has different cancer-causing chemicals that are absorbed by the body through lungs then carried in the bloodstream throughout the body. Researchers found tobacco byproducts in the cervical mucus of women who smoke. They believed that these substances can damage the DNA of the cells found in cervix and leads to mutation that causes cervical cancer.

3. Long term use of birth control pills: Oral contraceptives might increase the risk of cervical cancer by changing the cervical cells to persistent infection with high-risk HPV types. According to the study, women who have used oral contraceptives for 5 or more years have a higher risk of cervical cancer than those who are not. However, the risk goes back down over the years after the woman stop taking oral contraceptives.

4. Chlamydia infection: This infection is another type of sexually transmitted infection, certain studies show that Chlamydia helps in the growth of HPV in the cervix that increases the risk of cervical cancer.

5. History of Cancer: Woman in the family that is diagnosed with cervical cancer has more likely to have one. Due to the inherited mutation in genes related to HPV infection making them more susceptible to infection thus increasing the risk of having cervical cancer.

How Cervical Cancer Affects your Fertility?

Having cervical cancer is troublesome, especially for women under “childbearing age”. Cancer treatments may require therapies that involves radiation, drugs that will destroy cancer cells such as chemotherapy or surgical operation such as removal of tissues with cancer cells. And by such, those kinds of treatment can damage the patient’s reproductive system since the target organ of the cancer is the cervix as well as the target organ of the chosen treatment. It may cause difficulty in conceiving or worse permanent infertility to the patient being treated.

Chemotherapy:

When a patient undergoes chemotherapy, the drugs will kill both cancer cells and healthy cells. There is a possibility that even the egg cells stored in the ovaries could be damaged too. It will put the patient at risk of miscarriage and early menopause. Radiation Treatment On the other hand, if the patients choose to use radiation therapy, high energy rays are used to aim the patient’s pelvis to kill the cancer cells. This will expose the ovaries to radiation that will damage the egg cells stored in ovaries resulting to premature menopause. Moreover, the risk of miscarriage also increases due to the exposure of patient’s uterus to the radiation. Radiation may cause scar to the uterus and reduces blood flow in that area.

Conization:

This type of surgery is used for patients with small growths of tumor in their cervix. This procedure removes the cancerous tissues surrounding the cervix. But doing this procedure may scar your cervix and may lead to a higher risk of miscarriage or infertility.

Radical Trachelectomy

This procedure involves taking out some of the surrounding tissues, some portion of upper vagina and nearby lymph nodes. In doing this procedure, there is 70% chance of carrying a pregnancy term. Though the pregnancy will be considered as high-risk and will need to deliver your baby in C section. But in some condition, chemotherapy, radiation treatment or hysterectomy (removal of uterus or cervix) are the options needed to treat the patient.

Chemotherapy and radiation treatment can destroy the eggs and damage the uterus. In order to preserve the patient’s fertility, it is recommended to have egg freezing before the procedure takes place. By egg freezing and with the help of assisted reproductive technology called IVF, the patient is still capable of bearing a child either using her own uterus or through surrogacy. As you can see, cervical cancer can make the patients infertile by damaging some parts of their reproductive organs. But with the help of the innovations in our health technology nowadays, it is still possible to conceive a child. Egg freezing together with in vitro fertilization (IVF), as the most common assisted reproductive technology, can help cancer patients to have their offspring even after doing such procedures.

Reference: C. Marth, F. Landoni, S. Mahner, M. McCormack, A. Gonzalez-Martin and N. Colombo *Ann Oncol* (2017) 28 (suppl 4): 72–83.

STAFF PUBLICATIONS

1. Balakrishna T, Vidyadhara S, Abhigna N, Akhila N, Lakshmi Sravanth S, Vardhan G, Anjali L. Development and Evaluation of Valsartan Fast Disintegrating Films. Asian Journal of Pharmaceutics. Volume 16, No. 1 (2022).
2. Sri Harsha K, Vidyadhara S, Balakrishna T, Sasidhar R L, Sowjanya Lakshmi B. Design and Evaluation of Losartan Potassium Controlled Release Microcapsules. Asian Journal of Pharmaceutics. Volume 16, No. 1 (2022).
3. Harsha K , Vidyadhara S, Balakrishna T , Ramu A. Design And Evaluation Of Bosentan Controlled-Release Microcapsules. International Journal of Applied Pharmaceutics. Volume 14, Issue 2 (2022).

2021-22 I BPharmacy and I PharmD Classwork Inauguration



Nari-Bheri-2022 on the eve of International Women's Day



Campus Placement Drive by Exceclra



First Prize in Cartoon Making Competition on the Theme - The World's Largest COVID 19 Vaccination Campaign Uniqueness, Implementation, Challenges and way forward



MoU with Sri Ractna Solutions, Chennai



National Science Day



National Youth Day



World Kidney Day



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